What is claimed is:

1. A liquid-crystalline medium comprising

a) one or more liquid-crystalline compounds and

b) polymers composed of one or more polymerizable compounds of the general formula (I)

$$P^1\text{-}Sp^1\text{-}X^1\text{-}A^1\text{-}(Z^1\text{-}A^2)_n\text{-}R \qquad (I)$$

where:

R is H, F, Cl, CN, SCN, SF_5H, NO_2, straight-chain or branched alkyl having from 1 to 12 carbon atoms, of which one or two nonadjacent CH_2 groups may be replaced by -O-, -S-, -CH=CH-, -CO-, -OCO-, -COO-, -O-COO-, -S-CO-, -CO-S-, -CH=CH- or -C≡C- in such a way that oxygen and/or sulfur atoms are not directly bonded together, or $-X^2\text{-}Sp^2\text{-}P^2$,

P and P^2 are each independently a polymerizable group, preferably $-O(CO)\text{-}(CH_2)_o\text{-}CH=CH_2$, $-O(CO)\text{-}CH=CH\text{-}(CH_2)_p\text{-}H$, $-CH=CH\text{-}(CH_2)_q\text{-}H$, or $-O(CO)\text{-}C(CH_3)=CH\text{-}(CH_2)_r\text{-}H$ where o, p, q, r = 0-8,

Sp^1 and Sp^2 are each independently a spacer group, preferably $-(CH_2)_m-$ where m = 1-8, or a single bond,

X^1 and X^2 are each independently -O-, -S-, $-OCH_2-$, $-CH_2O-$, -CO-, -COO-, -OCO-, -OCO-O, $-CO\text{-}NR^0-$, $-NR^0\text{-}CO-$, $-OCH_2-$, $-CH_2O-$, $-SCH_2-$, $-CH_2S-$, -CH=CH-COO-, -OOC-CH=CH- or a single bond,

A^1 and A^2 are each independently 1,4-phenylene in which one or more CH groups may be replaced by N, 1,4-cyclohexylene in which one or more nonadjacent CH_2 groups may be replaced by O and/or S, 1,4-cyclohexenylene, 1,4-bicyclo(2,2,2)octylene, piperidine-1,4-diyl, naphthalene-2,6-diyl, decahydronaphthalene-2,6-diyl, 1,2,3,4-tetrahydro-

naphthalene-2,6-diyl or indane-2,5-diyl, and all these groups may be unsubstituted or mono- or polysubstituted by L,

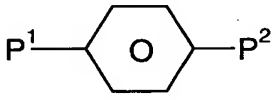
L is F, Cl, CN or alkyl, alkoxy, alkylcarbonyl, alkoxycarbonyl or alkylcarbonyloxy having from 1 to 7 carbon atoms, in which one or more hydrogen atoms may be replaced by F or Cl,

Z^1 is -O-, -S-, -CO-, -COO-, -OCO-, -O-COO-, $-OCH_2-$, $-CH_2O-$, $-SCH_2-$, $-CH_2S-$, $-CF_2O-$, $-OCF_2-$, $-CF_2-S-$, $-SCF_2-$, $-CH_2CH_2-$, $-CF_2CH_2-$, $-CH_2-CF_2-$, $-CF_2-CF_2-$, -CH=CH-, -CF=CF-, -C≡C-, -CH=CH-COO-, -OCO-CH=CH-, CR^0R^{00} or a single bond, and

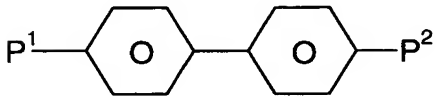
R^0 and R^{00} are each independently H or alkyl having from 1 to 4 carbon atoms,

n is 0, 1 or 2.

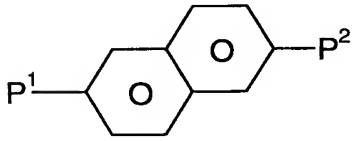
2. A liquid-crystalline medium as claimed in claim 1, characterized in that the polymerizable compounds are selected from the following formulae



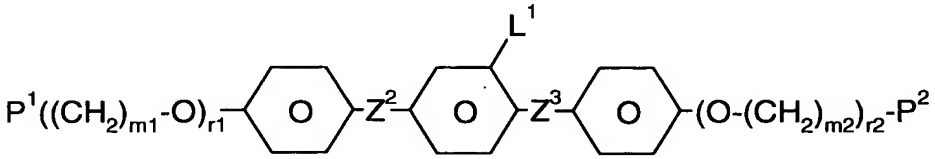
(Ia)



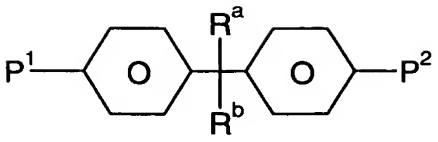
(Ib)



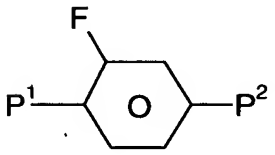
(Ic)



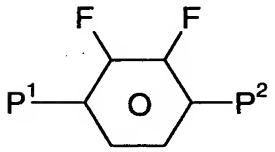
(Id)



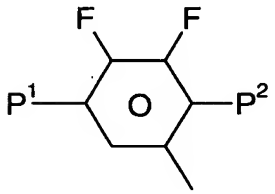
(Ie)



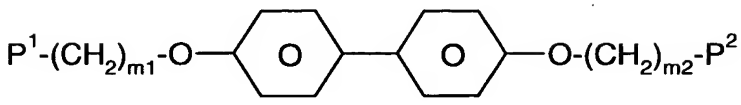
(If)



(Ig)



(Ih)

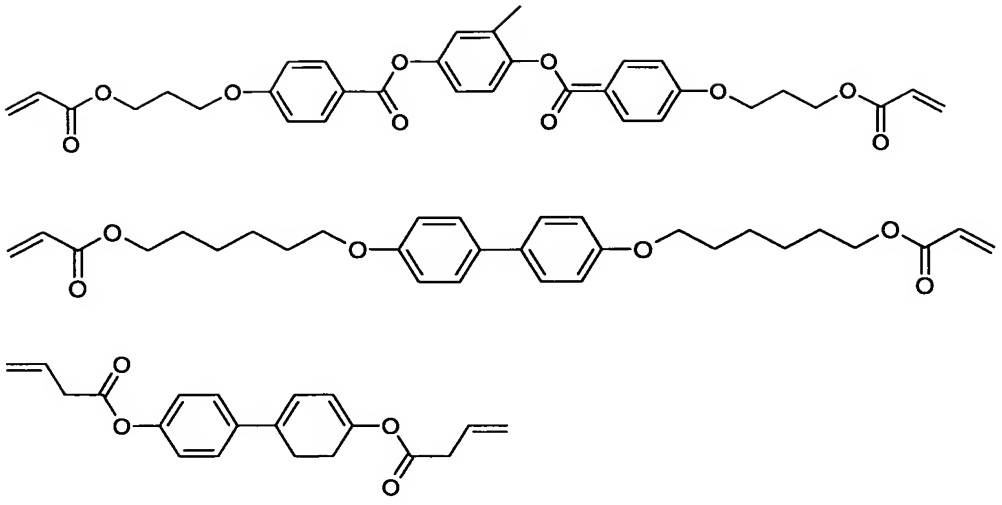


(Ii)

where P^1 and P^2 are each as defined above, Z^2 and Z^3 are each independently as defined for Z^1, m1 and m2 are each independently from 1 to 8, r1 and r2 are each independently 0 or 1, and R^a and R^b are each independently H or CH_3, and L^1 is H or $-CH_3$.

3. A liquid-crystalline medium as claimed in claim 1 or 2, characterized in that P^1 and P^2 are each independently a polymerizable group selected from $-O(CO)-(CH_2)_o-CH=CH_2$, $-O(CO)-CH=CH-(CH_2)_p-H$, $-CH=CH-(CH_2)_q-H$ and $-O(CO)-C(CH_3)=CH-(CH_2)_r-H$
where o, p, q, r = 0-8.

4. A liquid-crystalline medium as claimed in one of claims 1-3, characterized in that the polymerizable compound is selected from the following compounds:



5. A liquid-crystalline medium as claimed in one of claims 1-4 comprising 0.01-10% by weight of polymer b).

6. A mixture for producing liquid-crystalline media as claimed in one of claims 1-5 comprising

a) one or more liquid-crystalline compounds,

b) one or more compounds of the general formula I,

c) optionally one or more polymerization initiators.

7. A liquid crystal switching element comprising a liquid crystal layer of liquid-crystalline medium as claimed in one of claims 1-5.

8. An electrooptical liquid crystal display system comprising a multitude of liquid crystal switching elements as claimed in claim 7 which are arranged in matrix form.